

Mineral Industry Surveys

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COBALT IN FEBRUARY 2006

U.S. cobalt consumption during January through February 2006 was 3% lower than consumption during the first 2 months of 2005, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 90% higher in January 2006 than that of imports in December 2005. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals was 3% higher in January 2006 than that of exports during December 2005.

Update

Prices for electrolytic cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Date</u>	<u>Price range</u>
March 23	14.25-14.75
March 30	14.75-15.50
April 6	15.20-15.70

<u>Month</u>	<u>Average price</u>
March	14.45

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2005:				
February	292	153	197	641
March	253	175	187	615
April	268	151	187	605
May	256	154	198	608
June	254	176	194	624
July	261	147	177	585
August	276	151	201	628
September	263	159	201	623
October	266	154	201	621
November	259	147	201	606
December	248	148	201	597
January-February ^r	570	303	393	1,270
January-December ⁴	3,170	1,860	2,340	7,380
2006:				
January	271	150 ^r	201	623 ^r
February	257	152	201	611
January-February	528	302	403	1,230

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes metal powder.

³Data may include other cobalt materials.

⁴Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE¹

(Metric tons, contained cobalt)

End use	2005		2006	
	January- February	January- December ²	February	January- February ³
Steel	101 ^r	598	47	97
Superalloys	589	3,300	279	566
Magnetic alloys	39 ^r	235	20	41
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	131 ^r	762	62	125
Chemical and ceramic uses ⁶	360 ^r	2,210	180	359
Miscellaneous and unspecified	45	271	23	45
Total	1,270 ^r	7,380	611	1,230

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Data based on monthly reports.

³Includes revisions to prior months' data.

⁴Includes nonferrous alloys, welding materials, and wear-resistant alloys.

⁵Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁶Includes catalysts, driers in paints or related usages, feed or nutritive additives, glass decolorizer, ground coat frit, pigments, and other uses.

TABLE 3
U.S. REPORTED STOCKS OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Industry ²			Total	U.S. Government, metal ⁵
	Metal ³	Oxide and other chemical compounds ⁴	Scrap		
2005:					
February	349	210	108	667	2,540
March	344	195	105	643	2,340
April	341	208	110	659	2,220
May	351	199	108	658	2,180
June	347	186	101	634	2,070
July	370	201	114	684	1,930
August	341	191	132	664	1,870
September	353	187	132	672	1,810
October	340	180	132	653	1,670
November	326	182	132	641	1,560
December	330	179	132	641	1,550
2006:					
January	344 ^r	176	133 ^r	652	1,520
February	354	172	133	659	1,500

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Stocks reported by cobalt processors and consumers.

³Includes metal powder.

⁴Data may include other cobalt materials.

⁵Data from Defense National Stockpile Center. Includes material committed for sale pending shipment.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Metals ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{5, 6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2005:								
January	727,000	\$27,000,000	128,000	\$4,010,000	230,000	\$2,860,000	897,000	897,000
February	892,000	35,600,000	95,400	2,660,000	191,000	2,730,000	1,030,000	1,930,000
March	544,000	21,000,000	183,000	5,640,000	215,000	2,690,000	747,000	2,680,000
April	818,000	29,800,000	75,100	1,950,000	98,600	1,230,000	907,000	3,590,000
May	885,000	29,900,000	87,600	2,570,000	173,000	1,660,000	1,000,000	4,580,000
June	904,000	30,100,000	91,600	2,620,000	187,000	2,050,000	1,030,000	5,620,000
July	712,000	22,600,000	119,000	2,920,000	120,000	1,130,000	835,000	6,450,000
August	829,000	23,900,000	82,500	2,210,000	150,000	1,690,000	946,000	7,400,000
September	846,000	26,800,000	113,000	2,770,000	167,000	1,400,000	980,000	8,380,000
October	846,000	26,500,000	111,000	2,610,000	237,000	2,640,000	1,010,000	9,390,000
November	971,000	28,300,000	116,000	2,790,000	158,000	1,840,000	1,120,000	10,500,000
December	379,000	11,000,000	108,000	2,380,000	271,000	2,850,000	555,000	11,100,000
January-December	9,350,000	312,000,000	1,310,000	35,100,000	2,200,000	24,800,000	11,100,000	XX
2006:								
January:								
Australia	4,730	75,400	--	--	--	--	4,730	4,730
Belgium	15,500	549,000	42,800	1,040,000	18,100	208,000	54,600	54,600
Brazil	20,000	514,000	--	--	--	--	20,000	20,000
Canada	108,000	3,440,000	--	--	--	--	108,000	108,000
China	134,000	3,900,000	3,490	76,100	71,000	841,000	168,000	168,000
Cote d'Ivoire	--	--	3,600	70,900	--	--	2,590	2,590
Finland	20,700	670,000	25,600	532,000	73,300	1,090,000	68,800	68,800
France	1,130	78,900	3,840	171,000	--	--	3,890	3,890
India	1,500	42,200	--	--	64,800	393,000	19,000	19,000
Japan	11,900	395,000	--	--	--	--	11,900	11,900
Korea, Republic of	60	2,750	--	--	--	--	60	60
Kyrgyzstan	--	--	--	--	1,600	21,700	736	736
Morocco	40,000	1,090,000	--	--	--	--	40,000	40,000
Norway	279,000	7,460,000	--	--	--	--	279,000	279,000
Philippines	--	--	--	--	6,300	129,000	2,640	2,640
Russia	186,000	4,630,000	--	--	--	--	186,000	186,000
South Africa	21,000	547,000	--	--	--	--	21,000	21,000
United Kingdom	7,470	96,300	2	2,550	9,960	141,000	10,900	10,900
Zambia	56,000	1,460,000	--	--	--	--	56,000	56,000
Total	906,000	25,000,000	79,300	1,890,000	245,000	2,830,000	1,060,000	1,060,000

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

³Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

⁴Customs value.

⁵Estimated from gross weights.

⁶May include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY ¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Unwrought cobalt alloys		Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Quantity	Value ²	Quantity	Value ²	Quantity	Value ²
2005:						
January	5,110	\$190,000	72,000	\$463,000	12,400	\$938,000
February	89	16,700	24,100	380,000	18,800	1,360,000
March	1,100	52,200	82,000	887,000	15,800	1,100,000
April	1,080	65,100	47,400	571,000	31,700	2,030,000
May	11,100	348,000	75,400	845,000	21,300	1,550,000
June	500	33,000	120,000	1,060,000	20,500	1,540,000
July	1,990	95,700	17,100	276,000	27,300	1,730,000
August	675	42,800	91,800	856,000	12,400	1,060,000
September	23,500	711,000	42,700	495,000	18,300	1,150,000
October	10,700	372,000	88,200	594,000	18,700	1,520,000
November	10,100	410,000	100,000	1,090,000	36,900	2,190,000
December	35,200	350,000	53,600	363,000	21,700	1,510,000
January-December	101,000	2,690,000	815,000	7,880,000	256,000	17,700,000
2006:						
January:						
Belgium	--	--	--	--	13	7,870
Canada	--	--	--	--	1,540	321,000
China	--	--	--	--	153	12,100
France	--	--	--	--	3,530	260,000
Germany	55	4,560	13,800	303,000	293	30,000
India	--	--	--	--	507	23,000
Ireland	--	--	8,100	129,000	--	--
Japan	--	--	--	--	1,410	55,800
Switzerland	--	--	--	--	1	2,710
Taiwan	--	--	1,800	27,000	--	--
United Kingdom	330	9,410	36,100	629,000	7,120	424,000
Total	385	14,000	59,800	1,090,000	14,600	1,140,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS¹

(Kilograms, gross weight of material, except as noted)

Period	Unwrought cobalt, powders, matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2005:								
January	122,000	\$5,590,000	27,300	\$596,000	59,600	\$398,000	156,000	156,000
February	120,000	3,990,000	52,200	1,610,000	118,000	363,000	186,000	342,000
March	107,000	4,650,000	57,500	1,260,000	145,000	489,000	183,000	525,000
April	154,000	6,380,000	36,900	862,000	36,500	380,000	189,000	714,000
May	207,000	5,980,000	93,500	2,250,000	36,600	205,000	283,000	998,000
June	170,000	5,710,000	107,000	1,860,000	26,300	217,000	253,000	1,250,000
July	174,000	5,280,000	39,700	818,000	75,200	621,000	221,000	1,470,000
August	170,000	5,560,000	25,500	581,000	18,900	137,000	193,000	1,660,000
September	108,000	4,050,000	154,000	1,780,000	30,400	229,000	226,000	1,890,000
October	147,000	6,240,000	68,000	1,610,000	18,400	119,000	201,000	2,090,000
November	103,000	4,030,000	57,700	1,480,000	88,900	390,000	166,000	2,260,000
December	90,100	3,130,000	110,000	2,410,000	49,200	275,000	181,000	2,440,000
January-December	1,670,000	60,600,000	829,000	17,100,000	704,000	3,820,000	2,440,000	XX
2006, January	96,100	3,850,000	108,000	2,610,000	51,500	317,000	187,000	187,000

XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other intermediate products of cobalt metallurgy and unwrought cobalt alloys.

³Cobalt acetates and cobalt chlorides.

⁴Free alongside ship (f.a.s.) value.

⁵Estimated from gross weights.

⁶Year to date may include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, AND CONCENTRATES¹

(Kilograms, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value ²	Quantity	Value ²
2005:				
January	184,000	\$6,490,000	69,000	\$2,800,000
February	235,000	8,710,000	8,390	254,000
March	147,000	6,540,000	40,700	556,000
April	184,000	6,530,000	33,000	818,000
May	129,000	6,080,000	49,200	1,300,000
June	230,000	9,230,000	36,200	1,200,000
July	224,000	8,410,000	--	--
August	213,000	7,950,000	242,000	1,870,000
September	147,000	6,370,000	139,000	1,720,000
October	222,000	8,360,000	41,800	1,050,000
November	216,000	8,370,000	--	--
December	204,000	8,800,000	69,200	562,000
January-December	2,340,000	91,800,000	729,000	12,100,000
2006, January	188,000	7,160,000	5,150	129,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Free alongside ship (f.a.s.) value.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.